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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,298	04/05/2005	Andrei Radulescu	NL03 0407 US	3645

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EXAMINER	
DIVECHA, NISHANT B	
ART UNIT	**PAPER NUMBER**
4144	
MAIL DATE	**DELIVERY MODE**
03/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,298	RADULESCU, ANDREI	
	Examiner	Art Unit	
	NISHANT B. DIVECHA	4144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/05/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-9 have been examined and pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eberle (US 6,990,098 B1).

Regarding claim 1, 9, Eberle teaches a method comprising

a network and a plurality of modules which are arranged to communicate to each other via the network (see figure 4-5, item 401, teaches a switch creating a network to communicate between plurality of modules, N1-N8),

wherein the network is arranged to establish transactions between a first module (N1) and at least two second modules (N5, N6) the network being arranged to send a plurality of requests from the first module to the second modules (figure 4, teaches N1 teaches multiple request to N5, N6 and N7), and

wherein the second modules are arranged to generate individual responses (501, 503, 505) indicating a result of the execution of the requests (see figure 5, teaches sending an ACK from the second modules after the second modules have received and processed the request. Further see col. 4, lines 6 – 20, teaches detecting error at the second modules, indicating the execution of the request),

characterized in that the network is arranged to generate a single response to the first module, dependent on the individual responses of the second modules (see figure 5, teaches individual responses from the modules being ORed into a single response to the first module). Eberle discloses all the subject matter of the claimed invention with the exception of a the method being implemented on an IC. However, it is officially noted that it is well known in the art at the time of invention to implement a method comprised on an IC. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to implement a method on an IC. This can be accomplished by programming a method on an application specific IC. The motivation for doing so would

be the real estate gained from performing the same function on an IC then implementing the functionality on the network components.

Regarding claim 2, Eberle further teaches a method wherein the network comprises a network interface (NI) to generate the single response to the first module (see figure 5, item 405, teaches an interface that combines and produces a single response).

Regarding claim 3, Eberle further teaches a method wherein the single response has a value which is dependent on a specific function of the individual responses of the second modules (see figure 6, teaches a merged ACK that has values from N5, N6 ORed together, a function that is dependent on the individual responses).

Regarding claim 4, Eberle further teaches a method wherein the specific function is defined such that the value of the single response indicates that at least one of the second modules has successfully executed the requests issued by the first module (see col. 3, lines 64-67 and col. 4 lines 1-20, teaches receiving an ACK that indicates successful reception of the request or indicating failure if the response cannot be processed correctly. Further see figure 6, teaches receiving at least one of the second module being successful).

Regarding claim 5, Eberle further teaches a method wherein the specific function is defined such that the value of the single response indicates that each of the second modules has successfully executed the requests issued by the first module (see col. 3, lines 64-67 and col. 4 lines 1-20, teaches receiving an ACK that indicates successful reception of the request or indicating failure if the response cannot be processed correctly. Further see figure 5, teaches receiving that each of the second module being successful).

Regarding claim 6, Eberle further teaches a method wherein the specific function is defined such that the value of the single response indicates a success if no error occurred (see figure 5, teaches all the nodes (N5, N6) being successful and transmitting ack that are all 1). Eberle teaches all the subject matter of the claimed invention with the exception of the value of the single response indicates a failure if at least one error occurred, wherein the value of the single response represents the most serious error. However, there are only few well known gates in the art, AND, OR, XOR, NOT, NOR, XNOR and NAND. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute one of the known gates, specifically AND gate, into the method to produce the value of the single response indicates a failure if at least one error occurred, wherein the value of the single response represents the most serious error. The motivation for doing so would be initiate a broadcast of the request again to ensure successful delivery of the request to all modules.

Regarding claim 8, Eberle further teaches a method wherein the individual responses carry data parts (carries data information such as successful or not, but not the command) transmitted by the second modules, the single response comprising the data parts and indicating which data parts originate from which second modules (see figure 5, item 509, teaches a merged ack and location of the corresponding data from corresponding module).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eberle (US 6,990,098 B1) in view of Suffin (US 6,691,257 B1).

Regarding claim 7, Eberle teaches all the subject matter of the claimed invention with the exception of a method wherein the specific function is defined such that the value of the single response indicates which types of error have occurred during execution of the requests. However, Suffin teaches a method wherein the specific function is defined such that the value of the single response indicates which types of error have occurred during execution of the requests (see fig. 5 teaches a response packet where error code identifies the type of error have occurred during the execution of the requests). Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the method disclosed by Suffin in the system of Eberle to identify an error code in a response to an execution of a request. This can be accomplished by identifying in the ACK the error code as specified by Suffin. One of

ordinary skill in the art would have been motivated to do so in order to adjust the response of the system based on the known error codes of the modules.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US 6691257 B1

b. US 6990098 B1

c. US 20030076826 A1

d. US 20030031175 A1

e. US 7065580 B1

f. US 6990098 B1

g. US 6980540 B1

h. US 6996651 B2

i. US 20050226240 A1

j. US 6691257 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NISHANT B. DIVECHA whose telephone number is (571)270-3125. The examiner can normally be reached on Monday through Friday 1030 am to 6 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on (571) 272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NBD/ 03/20/2008

/QUAN-ZHEN WANG/
Examiner, Art Unit 4144